

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-11 (Canceled) .

12. (New) A modulation apparatus comprising:

a modulator that modulates a first baseband signal and generates a modulated signal; and

a compensator that compensates a phase distortion between the first baseband signal and a second baseband signal that is generated by demodulating the modulated signal with respect to the first baseband signal based on a magnitude of a phase change between adjacent data of the first baseband signal and a predetermined constant.

13. (New) The modulation apparatus according to claim 12, wherein the compensator transforms the magnitude of the phase change into a magnitude of a frequency change in predetermined time, and beforehand compensates the phase distortion with respect to the first baseband signal based on the magnitude of the frequency change and the constant.

14. (New) The modulation apparatus according to claim 13, further comprising a storage that stores the constant obtained by dividing the phase distortion by the magnitude of the frequency change,

wherein the compensator obtains the phase distortion by multiplying the magnitude of the frequency change by the constant stored in the storage and beforehand compensates the obtained phase distortion with respect to the first baseband signal.

15. (New) The modulation apparatus according to claim 13, further comprising a storage that has a table storing phase distortion selection information that associates the magnitude of the frequency change with the constant,

wherein the compensator obtains the phase distortion by multiplying the constant selected by referring to the phase distortion selection information using the magnitude of the frequency change by the magnitude of the frequency change and beforehand compensates the obtained phase distortion with respect to the first baseband signal.

16. (New) The modulation apparatus according to claim 13, wherein the compensator obtains the constant by dividing the

phase distortion by the magnitude of the phase change and beforehand compensates the phase distortion obtained by multiplying the obtained constant by the magnitude of the frequency change with respect to the first baseband signal.

17. (New) The modulation apparatus according to claim 12, further comprising a demodulator that generates the second baseband signal and demodulates a received signal.

18. (New) The modulation apparatus according to claim 12, wherein the modulator modulates a carrier signal using the first baseband signal compensated by the compensator and generates the modulated signal.

19. (New) A communication apparatus having a modulation apparatus, wherein the modulation apparatus comprises: a modulator that modulates a first baseband signal and generates a modulated signal; and

a compensator that beforehand compensates a phase distortion between the first baseband signal and a second baseband signal generated by demodulating the modulated signal with respect to the first baseband signal based on a magnitude of a phase change

between adjacent data of the first baseband signal and a predetermined constant.

20. (New) A modulation method comprising:  
modulating a first baseband signal and generating a modulated signal;

obtaining a phase distortion between the first baseband signal and a second baseband signal generated by demodulating the modulated signal based on a magnitude of a phase change between adjacent data of the first base band signal and a predetermined constant; and

beforehand compensating the obtained phase distortion with respect to the first baseband signal.